5 HOME MANAGEMENT

5.1 Background

Parents have received information on home management of diarrhoea from BHU staff and community health workers, both male and female. BHU staff have emphasised ORS for oral rehydration therapy.

Male CHWs are taught how to manage diarrhoea in the home including the assessment of the child, the preparation and use of oral rehydration therapy and the indications for referral to the BHU. The training has included both preparation of oral rehydration salt solution and sugar salt solution, although major emphasis has been placed on the latter. In NWFP by the end of 1989 some 4,332 CHWs in 7 of the 10 regions had been trained.

Generally female health workers (FHW or TBA) have had some training on diarrhoea and usually this has included the preparation of a sugar salt solution. At the end of 1989 there were some 2,453 trained FHWs in NWFP working in 7 of the 10 regions.

The UNHCR survey of 1989 found that during a diarrhoeal episode 54% of children under 5 years received increased fluids and 57% of children received increased or unchanged food intake. Most children (99%) continued breast feeding during the episode. Only 24% of children received oral rehydration therapy; 21% received ORS and 3% were given SSS (refer Figure 3). A high percentage of 73% received medicine.

For those mothers using ORS, the majority, 70% obtained the sachets from the BHU. Some 6% obtained them from the bazaar or private medical store and 15% from a private medical practitioner. There was a high awareness of ORS with 95% of households having heard of it but only 19% could describe the preparation and 13% demonstrate it correctly (refer Figure 4).

Only 24% of households had heard of SSS and only 4% could describe and demonstrate it correctly. A common error in preparing both ORS and SSS was an incorrect volume of fluid.

5.2 Findings

There is insufficient information known about traditional use of home fluids for the management of diarrhoea and in particular about the use and acceptability of rice water.

The CHWs were usually familiar with both SSS and ORS for oral rehydration therapy but preferred the sugar salt solution. They treated significant numbers of children with diarrhoea in the community. Often they had access to both parents.

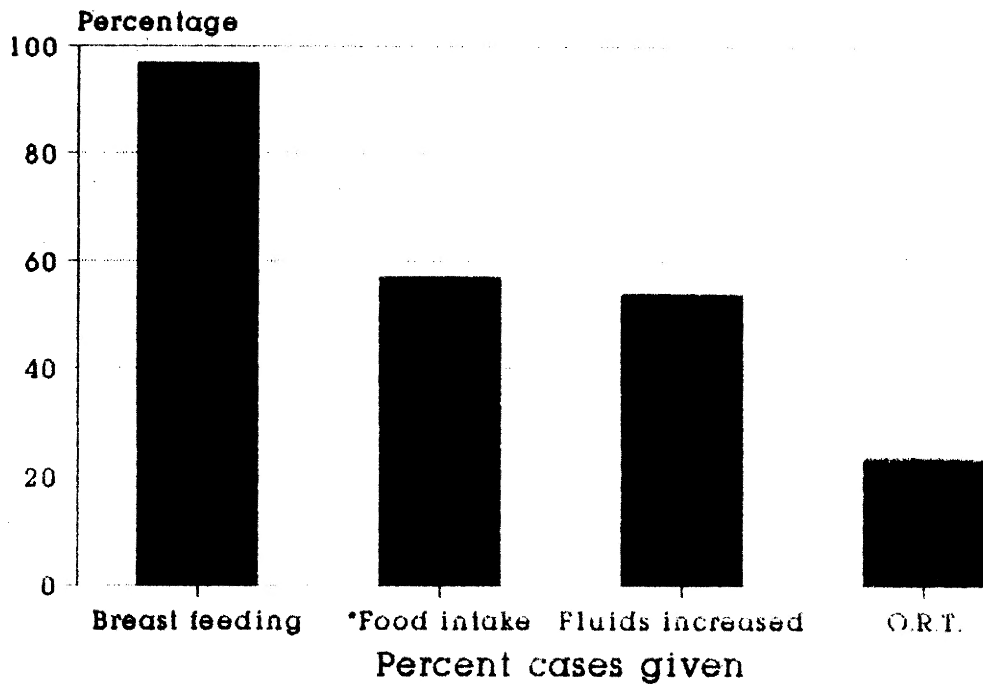
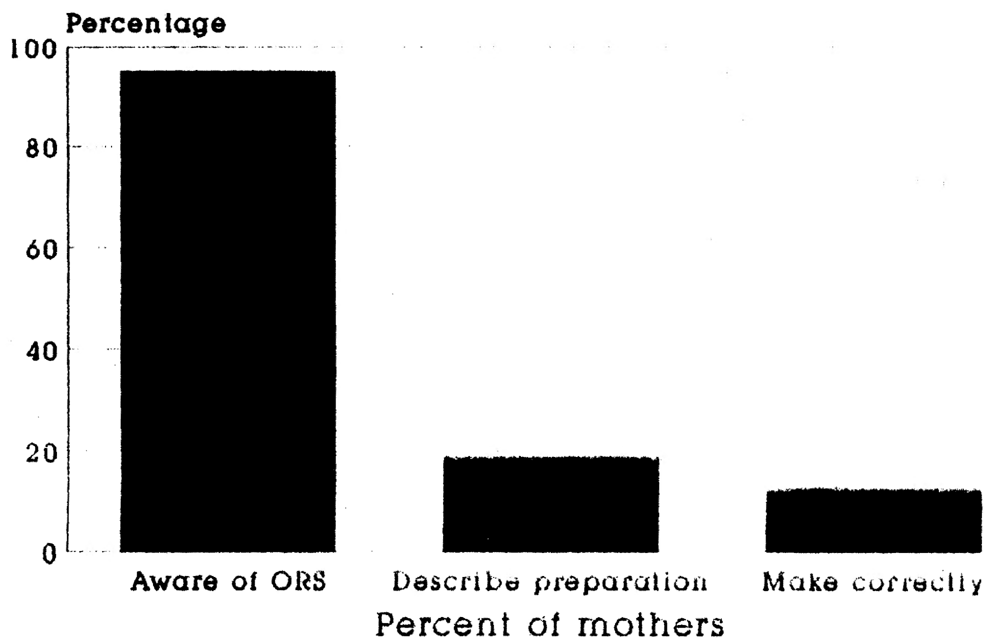

HOME MANAGEMENT DIARRHOEA
NWFP 1989
Percentage
100
80
60
40
20
0
Breast feeding
*Food intake
Fluids increased
O.R.T.
Percent cases given
*Food intake increased/unchanged

Figure 3


O.R.S.
NWFP, 1989
Percentage
100
80
60
40
20
0
Aware of ORS
Describe preparation
Make correctly
Percent of mothers

CHWs in describing management of diarrhoea in the home emphasised sugar salt solution but usually did not know how much to give, or how often or for how long and generally did not mention the importance of feeding. They lacked knowledge of the indications for referral to the BHU.

The FHWs who had been taught the preparation of SSS had difficulty in remembering how to prepare sugar salt solution.

Neither CHWs nor FHWs had adequate health education materials.

Both CHWs and FHWs have been taught that it is necessary to make ORS or SSS with boiled water.

Nimkol is a term often used to describe sugar salt solution as well as ORS.

The training of both FHWs and CHWs in diarrhoea is largely theoretical and does not include enough practical training.

5.3 Recommendations

General

1. Home fluids such as breast milk, food based fluids including boiled rice water and lentil soup, tea and water should be promoted for the initial home management of diarrhoea.

2. The prime messages on diarrhoea must be more widely promoted.

3. Health education materials should be produced to illustrate the prime messages. Laminated plastic flip charts which are not larger than A4 size would be most useful.

4. Health personnel should recommend that clean water be used for the preparation of ORS and they should be instructed as to which water is clean.

5. A knowledge, attitude and practises study should be conducted on the use of traditional fluids, including rice water, for the management of diarrhoea.

6. The terminology relating to SSS and ORS used by health personnel should be clarified and standard terms used.

C.H.W.s/F.H.W.s

7. CHWs/FHWs should be able to; recognise and assess diarrhoea, advise on home management, know when to refer to the clinic, prepare and advise on use of ORS, follow up a diarrhoea case and give health education messages on prevention of diarrhoea.

8. In the home management of diarrhoea CHWs/FHWS should;

- advise on use of home fluids including breast feeding
- advise on continued feeding using nutritious foods
- refer cases immediately to the BHU when; signs of dehydration or fever are present, the presence of blood in the stool or frequent vomiting.
- tell the parents the signs of dehydration and advice them to attend the BHU if they develop or there is no improvement in the child.
- reassess the patient after 24 hours

9. The training of CHWs/FHWs should place greater emphasis on the prime messages.

10. CHWs/FHWs who are trained in the future should be trained to promote home fluids for the initial management of diarrhoea and refer cases to the BHU if dehydration is present. They should receive training in the preparation and use of ORS. If a parent has ORS in the home and wishes to administer it the CHW/FHW should advise the parent on the correct way to prepare it and how much, how often and how long to give it.

11. CHWs/FHWs who have been trained to promote SSS as a home fluid for the initial management of diarrhoea should be advised that it is difficult for parents to remember how to prepare it correctly and that for early management of diarrhoea in the home the use of the recommended home fluids is easier.

12. The training of CHWs should include more practical training which can occur at the BHU after the establishment of the oral rehydration treatment corners.

13. CHWs/FHWs should be provide with graduated 1 litre jugs to assist them in preparing ORS or SSS for ORT.

14. Refresher courses on the management of diarrhoea should be given to FHSs and FHWs. The LHVs should receive training in supervisory skills and training besides management of diarrhoea to enable them to be trainers of FHWs and FHSs. Their capability as trainers should be assessed.

15. Refresher courses on the management of diarrhoea should be given to CHSs and CHWs as part of the preparation for repatriation training.

6. CASE MANAGEMENT IN BHUS

6.1 Findings

Some 6 BHUs in 5 districts and one hospital were visited during the review. Three of the BHUs were operated by Volags and 3 by the PDH. The practise and knowledge of the medical officer was assessed and in some BHUs the LHV was also assessed. Table 1 summarises the performance of the medical officer.

Table 1

CASE MANAGEMENT BY MEDICAL OFFICER

	BHU 1	2	3	4	5	6	Hosp 1
1. Clinical Practise							
- assessment	1	3	2	1	3	1	3
- treatment	2	3	2	1	1	3	3
- ORS practise	1	2	2	1	1	3	2
- health education & advice	1	2	1	1	1	1	2
2. Knowledge on diarrhoea							
- assessment	1	3	2	2	2	2	3
- treatment	1	3	1	2	1	3	3
- use of ORS	1	2	2	1	2	2	3
- home care	1	3	1	1	1	1	1
- prevention	1	3	2	1	2	2	1
3. Health education							
- materials	1	1	3	1	1	1	1
- activities	1	1	2	1	1	2	1

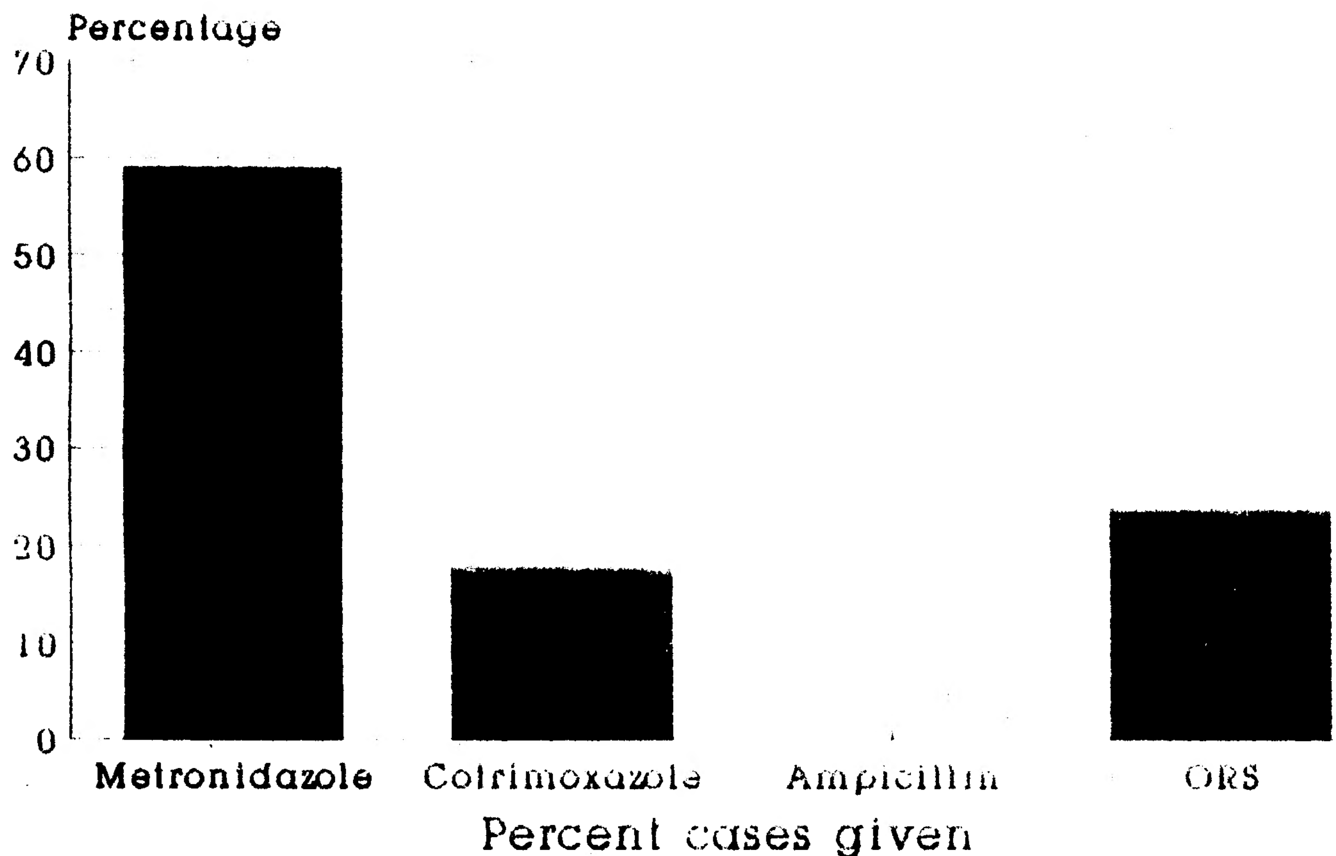
1 poorly
2 acceptable
3 well

There was considerable variation in knowledge and clinical practise. The treatment of diarrhoea was overall poor with lack of knowledge of the use of ORS, usually the amount to give (how much, how often, how long), and the failure to give the parent instructions or advice.

The registers were checked to assess the recent management of 20 diarrhoea and 20 dysentery cases by each review team. The management of 97 cases of diarrhoea and 78 cases of dysentery was analysed.

There was excessive use of antibiotics and antidiarrhoeals with some 21% of diarrhoea cases receiving an antibiotic and 29% receiving an antidiarrhoeal (refer Figure 5). Some 86% received ORS. No cases received intravenous therapy.

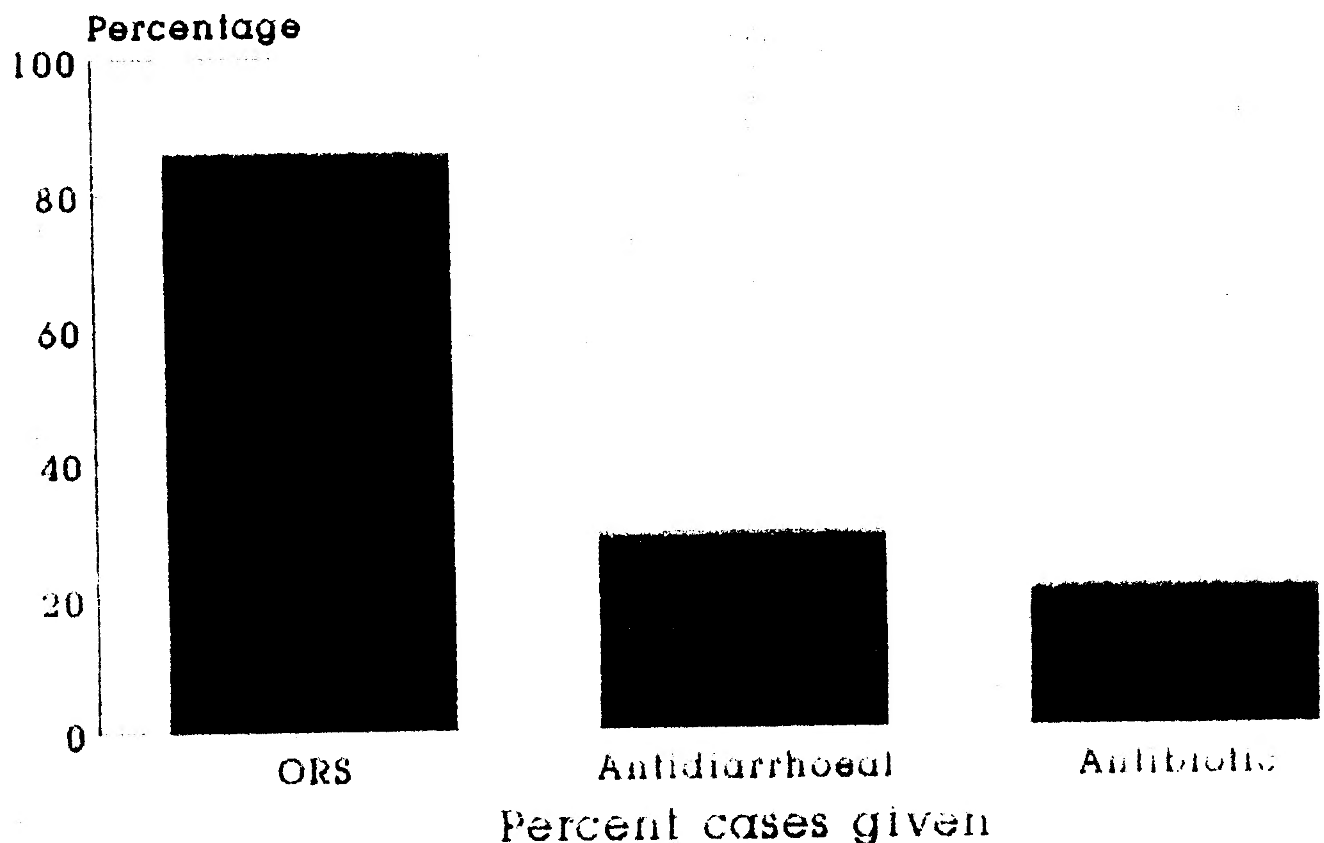
TREATMENT OF DYSENTERY
ANALYSIS OF 78 CASES



CDD REVIEW 1990

Figure 5

TREATMENT OF DIARRHOEA
ANALYSIS OF 97 CASES



The treatment of dysentery was very poor with most cases, 59% being incorrectly treated with an expensive drug, metronidazole which is highly likely to be ineffective. Only 18% of cases received cotrimoxazole which is the usual recommended therapy for shigella dysentery, the most common cause of dysentery. None received ampicillin usually another effective antibiotic. Only 24% received ORS (refer Figure 6).

In one BHU visited, run by a Voluntary Agency, an ORT corner had been established.

It was observed that washing facilities for health personnel were usually not present in BHUs and health staff did not wash their hands after examining patients with diarrhoea.

6.2 Recommendations

1. Oral rehydration treatment corners should be established in every BHU.

- in the corners the following functions would occur;
  demonstration of ORS preparation,
  supervised treatment of diarrhoea and dehydration,
  health education in home care, danger signs, breast feeding and nutrition, and prevention of diarrhoea.

- the responsibility for running the ORT corner would be assigned to the dispenser and the LHV. Other staff such as the FHS and CHS would also be assigned to attending to the ORT corner on regular days.

- there would be no age restriction to attendance,

- the ORT corner would have the following equipment; washing facilities, water container, jug, cups, spoons, domestic utensils, plastic sheet, charts and posters.

2. The introduction of ORT corners should occur in a phased manner. Initially one or two pilot ORT corners should be established to develop systems and gain experience in their operation.

3. Guidelines should be present in every BHU/SHU. The WHO Guidelines on the treatment and prevention of acute diarrhoea in English, Urdu and Dari versions are considered suitable. Wall charts based on the WHO treatment chart should be provided.

4. A study should be conducted in Afghan refugee villages on the aetiology of dysentery.

5. The Dialogue on Diarrhoea newsletter, Pakistani version should be provided regularly to health personnel working within the refugee health programme, one copy per BHU and FSMO.

7. TRAINING

7.1 Findings

There was no training of BHU staff in CDD activities.

There were no guidelines on management of diarrhoea.

7.2 Recommendations

General

1. Establish within office of Deputy Director CDD/Sanitation a training capability. One male training post should be created to be filled by a medical officer and also a female training post created and an L.H.V. appointed.

2. All categories of BHU/SHU staff will require training in management of diarrhoea, that is M.O.s, L.H.V.s, dispensers, dais, sanitarians, C.H.S.s, C.H.W.s, F.H.S.s and F.H.W.s. Vaccinators should also be trained.

3. F.S.M.O.s will require training in mid-level management of CDD.

4. Deputy Directors of M.C.H., P.H.C. and E.P.I. and medical coordinators from Voluntary Agencies should receive training in the mid-level management of CDD.

5. The Deputy Director for CDD/sanitation should receive training in the management of a CDD programme.

Training materials and curriculum.

6. A steering committee should be established to develop and approve training materials.

7. The committee should acquaint themselves with staff and activities of the two Diarrhoea Training Units (DTU) in Peshawar.

8. The following training materials are recommended;

   Master trainers/supervisors

- UNICEF diarrhoea management video in English, Urdu and Pushto.
- Imodium video.
- reference materials, WHO guidelines on acute diarrhoea adapted for Afghan refugee programme, Readings on diarrhoea WHO/PRITECH.
- statement on diarrhoea management policy.
- assessment and treatment wall charts modified from GOP charts.
- clinical forms for case management to be used as a training tool.
- WHO supervisory skills training modules on diarrhoea.

   Medical officers

- Readings on diarrhoea, WHO/PRITECH new version or selected sections from old version.
- flow charts summarising management.
- notes on communicating with parents and community on diarrhoea management in home.
- Diarrhoea Dialogue Pakistani version.

   L.H.V.s/dispensers

- WHO guidelines on management of diarrhoea in Urdu, Dari and Pushto.
- flow charts on management in an appropriate language.
- notes on use of health education materials.

   CHS/FHS and CHW/FHW

- training curricula under development to be modified to include revised policy on CDD.

9. The programme for training of health staff would be introduced in phases and in general would commence at the top and work down. That is training of Deputy Directors, FSMOS and trainers would occur initially followed by training of medical officers and LHVs then training of dispenser, dai, CHS, FHS and sanitarian. The retraining of CHWs and FHWs should occur after BHU staff have been retrained.

10. After a system has been established for operating the ORT corner one model ORT corner should be established in each district which can also be used for teaching purposes.

8. HEALTH EDUCATION MATERIALS

8.1 Findings

In the BHUs there were no health education materials related to CDD except for the one poster distributed a number of years ago on ORT.

8.2 Recommendations

1. The steering committee should revise the prime messages on CDD which are in the Health Education guidelines.

2. The committee should decide what staff require health education materials, the messages or content, the type (posters, flip charts, leaflets) and how many are required. HERC should be a member of the committee and participate fully in this process.

3. Accompanying the health education materials should be some suggestions as to how they may be used.

4. The prime messages should be incorporated into radio programmes broadcast by BBC through their Pushto service.

9. SURVEILLANCE

9.1 Findings

At all level of the refugee health programme there is lack of analysis of the morbidity data for diarrhoea and dysentery.

There is often a failure to recognise outbreaks of diarrhoea and investigate them adequately.

No laboratory facilities are routinely available for diagnosing dysentery or monitoring the response to therapy.

9.2 Recommendations

1. At all levels but particularly at the level of the BHU, the monthly outpatient figures for diarrhoea and dysentery should be analysed. This would include; a graph of incidence with the previous years incidence also plotted, and a calculation of the rate for diarrhoea and dysentery.

2. Staff should receive training in surveillance.

SUMMARY

A review of the Control of Diarrhoeal Disease (CDD) activities in the Afghan refugee health programme was conducted in NWFP in July 1990. Representatives of the Project Director for Health, Voluntary Agencies, UNICEF, UNHCR, and WHO participated.

FINDINGS

The major findings were;

1. There was a lack of coordination of the different CDD activities.

2. No plan of action existed.

3. Guidelines and wall charts on CDD were not available for health personnel.

4. Community Health Workers/Female Health Workers (CHW/FHW) promoted Sugar Salt Solution (SSS) as a home fluid for management of diarrhoea but SSS was rarely used by parents for management of diarrhoea and if used was not made with the correct proportions of sugar, salt and water.

5. The management of diarrhoea in Basic Health Units (BHU) was poor with health staff; lacking knowledge in how to use Oral Rehydration Salt solution (ORS), not giving adequate advice to parents, and excessive prescribing of antibiotics and antidiarrhoeals.

6. No training activities in CDD occurred.

7. Few health education materials related to CDD were present in BHUs.

8. Some BHUs ran out of ORS due to poor resupply from the Field Supervising Medical Officer (FSMO) district store.

RECOMMENDATIONS

The major recommendations were;

Organisation and management

1. The Project Director for Health to produce a plan of action for the control of diarrhoeal diseases in conjunction with UNHCR and UNICEF.

2. Responsibility for CDD to be assigned to the Deputy Director for Sanitation.

3. Outbreaks of diarrhoea should be reported by the medical officer to the FSMO. CHWs should be aware of the importance of early notification of outbreaks.

- Outbreaks of diarrhoea should be investigated using a standard format and a report submitted promptly to the DD by the FSMO.

- Procedures should be established for the collection and sending of specimens through the PDH to Government laboratories particularly when cholera is suspected.

4. Sentinel sites should be established at selected BHUs where more information could be collected on diarrhoea and dysentery cases, including aetiology and response to therapy.

10. LOGISTICS

10.1 Findings

Some 6 BHUs were visited by the review teams. One BHU had no stock of ORS and had been out of stock for several days but the FSMO store for that BHU had plentiful supplies of ORS. The other 5 BHUs had supplies of ORS for 0.5 to 7 months. Three BHUs had experienced shortages of ORS over the last year and for one BHU the information was not available. The monthly use of ORS averaged 320 sachets per month.

Some 4 FSMO's stores were visited and the stock of ORS ranged from 2,180 sachets sufficient for 2 weeks to 27,410 sachets sufficient for 11.5 months. No FSMO store had been without ORS during the last year. The monthly consumption for Hazara, Kohat, Dir and Mardan districts averaged 2,222 sachets per month.

The provincial store in Peshawar had adequate stocks of ORS and during 1989 supplied some 600,000 sachets of ORS. During 1989 ORS containing sodium bicarbonate was procured and supplied to PDH BHUs.

10.2 Recommendations

1. No BHU should ever be without ORS.

- BHUs should try to maintain their stock of ORS between a minimum supply of one month and a maximum of 3 months.

- FSMO's district stores should try to maintain their stock between a minimum of 3 months and a maximum of 6 months.

2. Only ORS conforming to the WHO/UNICEF recommended specifications should be procured. WHO recommends that trisodium citrate, dihydrate be used in place of sodium bicarbonate because of its greater stability.

11. IMMEDIATE ACTION

Recommendations

1. The review report should be widely circulated in NWFP to concerned health personnel and meetings should be held of Project Directorate Health and Voluntary Agency staff to discuss findings and recommendations. The comments and suggestions for change should be noted.

2. A plan of action should be prepared detailing the programme for the control of diarrhoeal diseases with objectives, targets, and action to be taken.

3. A steering committee with representatives from P.D.H., UNICEF, HERC, SCF(UK), selected Voluntary Agencies and UNHCR should be established to advise on formulation of plan of action and implementation of the recommendations of the review including the revision of the prime messages and types of health education materials required.

ANNEX 1

List of Participants

Name	Title	Organization
Dr. Zafar Shah Afridi	Project Director for Health	P.D.H.
Dr. Shireen Jan	Deputy Director M.C.H.	P.D.H.
Dr. Hafiz Saeed Khan	Deputy Director P.H.C.	P.D.H.
Dr. Saeed Khan	Deputy Director Sanitation	P.D.H.
Dr. Altaf Hussein	F.S.M.O. Kohat	P.D.H.
Dr. Afsar Khan	F.S.M.O. Peshawar	P.D.H.
Dr. Etsuko Kita	Programme Officer Health	UNICEF
Dr. Rudi Coninx	Programme officer Health	W.H.O.
Ms. Jenni Corr	Director P.H.C.	S.C.F.(UK)
Dr. Faiz	Manager C.H.W. Prog.	S.C.F.(UK)
Ms. Petra V-D Bongart	Advisor F.H.W. Prog.	S.C.F.(UK)
Ms. Sophie Forman	Manager F.H.W. Prog.	S.C.F.(UK)
Dr. Zamani	Medical Director	A.R.C.
Dr. Ghulam Farid	Medical Director	S.R.C.
Dr. Zafar	Medical Director	I.R.C.
Dr. Kees Kostermans	Medical Coordinator	M.S.F.(Neth)
Dr. S.Welsby	Consultant	PRITECH
Ms. Jum	Director	HERC
Dr. Naveeda Bano	Programme officer Health	(Peshawar) UNHCR
Dr. Joe Caraher	Medical coordinator	(Peshawar) UNHCR
Dr. Yasahide Nakamura	Programme officer Health	(Islamabad) UNHCR
Dr. Richard Nesbit	Senior Health Coordinator	(Islamabad) UNHCR

ANNEX 2

LIST OF PLACES VISITED

BASIC HEALTH UNITS

District	B.H.U.	Organization
Dir	Timor	P.D.H.
Haripur	Panian 3	P.D.H.
Kohat	Ghamkol	P.D.H.
Mardan	Baghicha	A.R.C.
Peshawar	Azarkhel	AHSAO
	Munda	Union Aid

HOSPITALS

District	Hospital	Organization
Mardan	Barakai	Union Aid
Peshawar	Munda	Union Aid

F.S.M.O. Offices

Dir

Haripur

Kohat

Mardan

P.D.H. Central Store

Azarkhel

Diarrhoea Training Units

Lady Reading Hospital

Khyber Teaching Hospital

3. A steering committee with representatives from P.D.H., UNICEF, Health Education Resource Centre (HERC), Save the Children Fund (UK), other selected Voluntary Agencies and UNHCR should be established to advise on formulation of plan of action and implementation of the recommendations of the review.

Home management

4. Home fluids such as breast milk, food based fluids including boiled rice water and lentil soup, and tea should be promoted for the initial home management of diarrhoea.

5. The prime messages on diarrhoea must be more widely promoted and given greater emphasis in the training of CHWs/FHWs.

6. In the home management of diarrhoea CHWs/FHWs should;

- advise on use of home fluids including breast feeding

- advise on continued feeding with nutritious foods

- refer cases immediately to the BHU when; signs of dehydration or fever are present , the presence of blood in the stool or frequent vomiting.

- tell the parents the signs of dehydration and advise them to attend the BHU if they develop or there is no improvement in the child.

- reassess the child after 24 hours.

7. CHWs/FHWs who have been trained to promote SSS as a home fluid for the initial management of diarrhoea should be advised that it is difficult for parents to remember how to prepare it correctly and that for early management of diarrhoea in the home the use of the recommended home fluids is easier.

8. Retraining should be given to CHWs and FHWs.

Case management in BHUs

9. Oral rehydration treatment corners should be established in every BHU.

10. Guidelines and wall charts on CDD should be present in every BHU.

Training

11. Under the Deputy Director for CDD/Sanitation 2 training posts should be established and a medical officer and Lady Health Visitor (LHV) appointed.

12. All categories of BHU/SHU staff will require training in the management of diarrhoea.

13. Deputy Directors, FSMOs and medical coordinators will require training in the mid-level management of CDD.

Health education materials

14. The steering committee should revise the prime messages for CDD.

15. The committee should decide what staff require health education materials, the messages or content, the type and how many are required.

Logistics

16. No BHU should be without O.R.S.

POLICY STATEMENT ON DIARRHOEA CASE MANAGEMENT

Based on the recommendations and findings of the review a draft statement on the policy of diarrhoea case management has been formulated. The National treatment policy for diarrhoea of the Government of Pakistan has been used as a basis for the statement.

DRAFT

AFGHAN REFUGEE HEALTH PROGRAMME CCAR/UNHCR/UNICEF

STATEMENT OF POLICY ON DIARRHOEA CASE MANAGEMENT

Control of diarrhoeal diseases will be a priority in the primary health care programme of the Afghan refugee health services in Pakistan. Improved case management is the primary strategy for decreasing diarrhoeal mortality in children under 5 years of age.

Control of diarrhoeal diseases (CDD) will focus on improving case management in treatment facilities; BHUs, SHUs and hospitals, and at the household level.

Strategies for the prevention of diarrhoea will be actively promoted by health level personnel.

HOME THERAPY

Family members can give home therapy to a child at home with diarrhoea. They should give the child increased fluids and continue to feed the child.

The recommended fluids for home therapy include breast milk, food based fluids including boiled rice water and lentil soup, and tea and water. Oral rehydration solution (ORS) is also suitable for home therapy. Sugar salt solution, which has previously been taught to community health workers will no longer be included in the training curricula for male and female community health workers as a suitable fluid for home therapy since it is difficult to remember to make it with the correct proportions and there is poor acceptability of this fluid in the community.

It is important that a child with diarrhoea continue to be given food. Recommended foods include a mixture of rice and lentils with added oil (khichri), banana and potato. Yoghurt is also suitable.

Family members should seek treatment beyond the home for a child with diarrhoea if the child has any of these signs:

- passes many stools
- is thirsty and/or irritable
- does not eat or drink normally
- seems not to be getting better
- has a fever
- has sunken eyes
- frequent vomiting

The community health worker should assess children with diarrhoea and if the child has signs or symptoms of dehydration then refer to the health unit. If signs are not present the health worker should advise the mother on home fluids, the need to continue feeding and the danger signs which indicate the need to attend the clinic.

If a mother wishes to use ORS the health worker should advise her on the correct way to prepare it and how much to administer.

TREATMENT IN THE BASIC HEALTH UNIT

The dehydration status of the child should be assessed initially. ORS should be given by health facilities to all diarrhoea cases with signs of dehydration who are able to drink and are not severely dehydrated. Packets should be given to mothers who have come to a health facility seeking help for a child with diarrhoea, even if the child has no signs of dehydration. Parents should be taught to give a child with diarrhoea increased fluids, to continue to feed the child and to bring a child who is not getting better back to the health unit. In the health unit there will be an area where children can be rehydrated and the parent taught how to prepare and give the ORS solution.

Parents will be provided with 2 packets of ORS for a diarrhoeal episode.

INTRAVENOUS FLUIDS

All children who develop two or more signs of severe dehydration or stupor, coma or uncontrollable vomiting will be given or referred for IV therapy. Ringer's lactate solution is recommended.

USE OF DRUGS

The use of antibiotics for treatment of diarrhoea is usually not appropriate and should be avoided. When there is blood in the stool and the diarrhoea has continued for less than 14 days, the health workers should treat for shigella dysentery and give cotrimoxazole, ampicillin or nalidixic acid.

No antidiarrhoeal drugs should be used.

PREVENTION

Strategies for the prevention of diarrhoea are;

- exclusive breast feeding for the first 4 months of life and continue breast feeding upto 2 years of age.
- good weaning practises with nutritious foods and using hygienic practises when preparing them.
- use of safe water
- washing hands after defecation or before preparing or eating food.
- use of latrines and proper disposal of stools.
- measles immunization.

These messages should be emphasized by all health personnel whenever possible, including when the parent is receiving instruction in the treatment of diarrhoea at the BHU.

THE REVIEW

1. INTRODUCTION

Diarrhoeal diseases have been recognized in NWFP as a major cause of morbidity and mortality and activities for their control have been incorporated into the primary health care programme, however no coordinated strategy has been developed nor has there been any overall plan of action. The need for strengthening control of diarrhoeal disease activities has been and is considered a priority.

It was recognized in 1988 that there was a lack of information on diarrhoea, its impact and management within the refugee community. In early 1989 a household survey on diarrhoea morbidity, mortality and household practises following the WHO methodology was conducted. It had been hoped to follow the survey in 1989 with a review of control of diarrhoeal disease (CDD) activities as the next step in the process of evaluating and reorganising activities within the Afghan refugee health programme. For various reasons the review was delayed until 1990.

However during 1989 a comprehensive programme review of the expanded programme for immunisation was conducted which resulted in major reorganisation and strengthening of this programme with new strategies being developed and a greatly expanded training component. This experience of evaluation and programme review, focusing on problem identification and the seeking of solutions, has assisted the review of the control of diarrhoeal disease activities.

This report summarises the findings and recommendations of the CDD review which occurred in July 1990.

2. METHODOLOGY

The review team consisted of representatives from the Project Directorate for Health, Voluntary Agencies, UNICEF, UNHCR and one person from PRITECH, a firm assisting the National and Provincial CDD programmes of the Government of Pakistan. (Annex 1)

The methodology was largely based on the protocol of WHO for conducting a comprehensive programme review. However the review did not attempt to be comprehensive and was considerably abbreviated. The review occurred over one week and only a few districts were visited. The review members were instructed to assess existing CDD activities, identify problems and seek solutions. Two days were allocated for field work. The districts and BHUs visited are listed in annex 2.

Following the field visits the review members divided into groups to discuss and analyse the findings, identify problems and make recommendations. On the fifth day the reports of the different groups were discussed and the recommendations finalised.

Based on the findings and recommendations of the review team a statement of policy on case management was formulated, using the National diarrhoea treatment policy of the Government of Pakistan as a basis.

3. BACKGROUND

3.1 Morbidity and mortality

In 1989 a household survey on diarrhoea morbidity, mortality and treatment practises was conducted by UNHCR amongst Afghan refugees under 5 years of age in NWFP. Previous surveys conducted by Centers for Disease Control in 1985 and 1986 had shown that diarrhoea was present in the week before death in 39% and 34% respectively of deaths in children under 5 years of age.

The 1989 survey determined that 40% of deaths in children under 5 years of age were associated with diarrhoea. The all causes under 5 mortality rate was 22 per 1000 children under 5 years. The annual diarrhoea incidence for children under 5 years was 4.7 episodes per child per year.

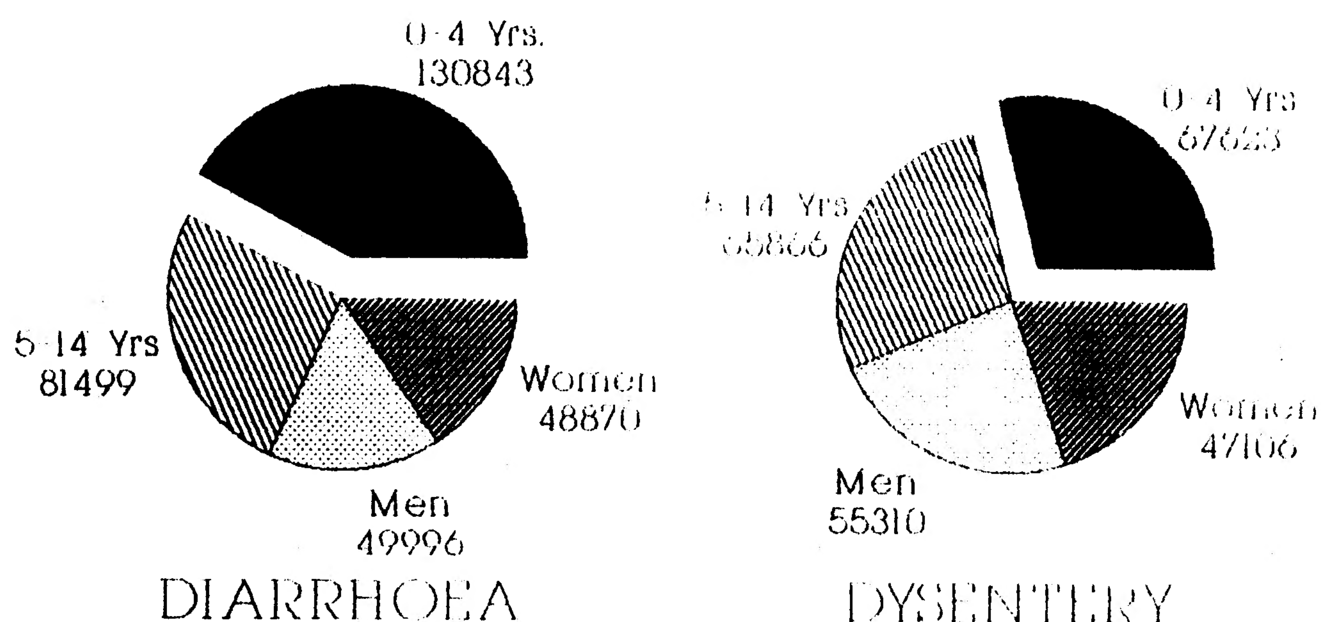
In 1990 these findings were largely confirmed by a survey on childhood mortality and nutritional status conducted with the assistance of CDC. The survey found that 42% of deaths in children under 5 years were associated with diarrhoea. The infant mortality rate was 82.4 deaths per 1000 live births (confidence intervals 61.7, 103.1) and 11.9% of children will die before they reach their fifth birthday.

This survey found that 22.3% of children had had diarrhoea in the last 24 hours compared to a point prevalence of 16.5% in the 1989 survey. The surveys were conducted over different times of the year and this will have contributed to the difference in the results for point prevalence.

3.2 Outpatient attendance

In 1989 some 311,208 cases of diarrhoea and 235,905 cases of dysentery were seen at BHUs of the PDH and Volags. The age breakdowns of the cases are provided in Figure 1. Some 42% of diarrhoea cases occurred in children under 5 years of age. The attendance for children with diarrhoea at clinics showed a seasonal variation however no such variation was shown for children under 5 years with dysentery. Refer Figure 2.

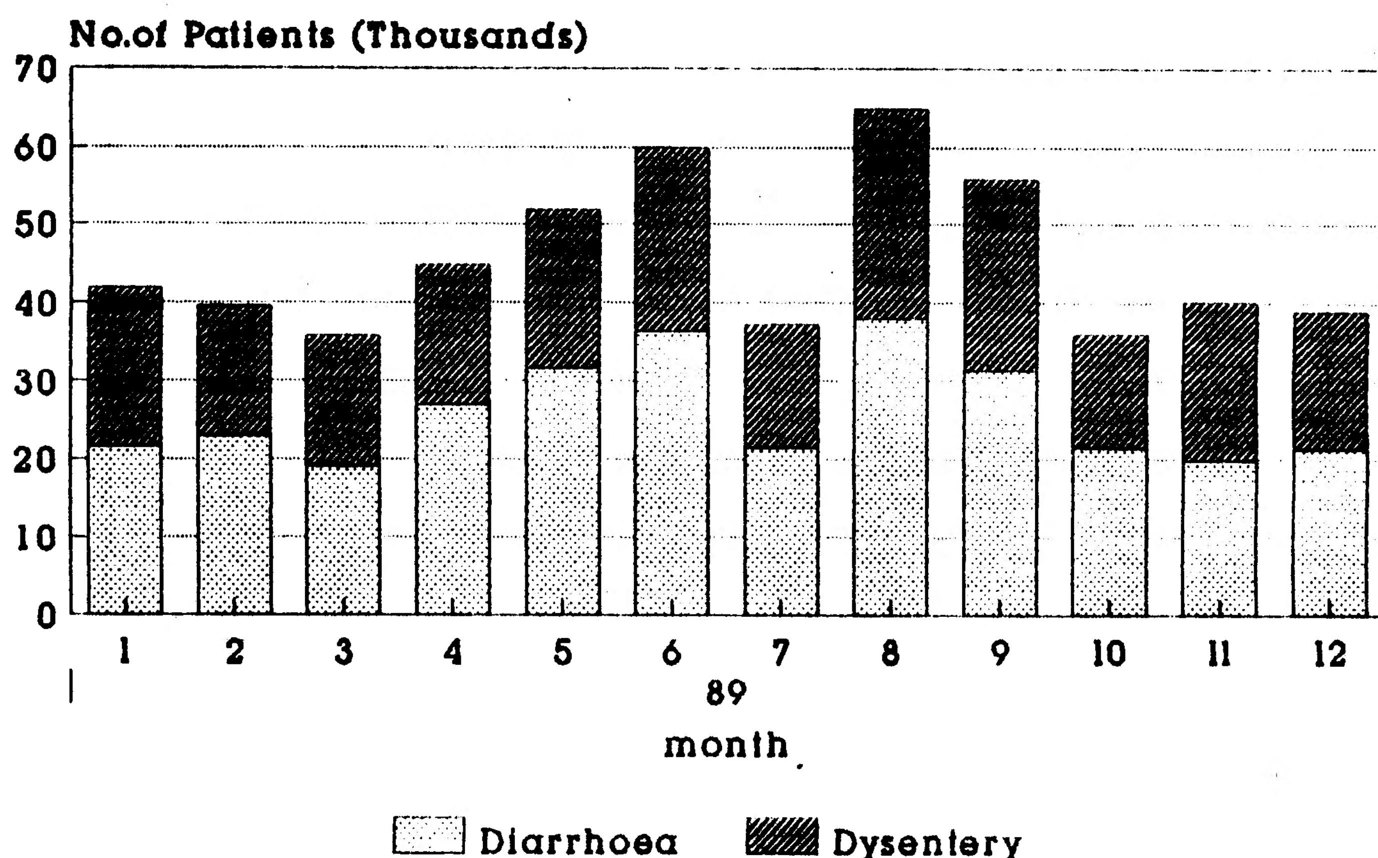
DIARRHOEA AND DYSENTERY
NWFP 1989, Age Distribution



From: monthly reports of PDH

Figure 1

DIARRHOEA in NWFP (1989)
DIARRHOEA:Actual Number of Patients



(From : monthly reports of PDH)

Figure 2

The official refugee population at the end of 1989 in NWFP was 2,241,702. Assuming 20% of the population was under 5 years of age the under 5 population was approximately 450,000. If each child had 4.7 episodes of diarrhoea per year, during 1989 children under 5 would have had 2,115,000 episodes of diarrhoea. That is only 6.2% of diarrhoeal episodes received treatment from the BHU.

FINDINGS OF THE REVIEW

4 ORGANIZATION AND MANAGEMENT

4.1 Findings

Control of diarrhoeal disease activities were integrated into the overall primary health care programme. There was little coordination between the different divisions such as maternal and child health and male community health worker programme.

The lack of coordination was exacerbated by the lack of a person responsible for control of diarrhoeal disease activities within the office of the Project Director for Health.

No plan of action with specified objectives, targets and strategies existed for the control of diarrhoeal diseases.

Guidelines had been prepared in 1986 and included in the Operations Manual, but had not been revised since then. BHUs did not have a copy of the Operations Manual.

4.2 Recommendations

1. The Project Director for Health to produce a plan of action for the control of diarrhoeal diseases, with specified objectives, strategies, targets, and indicating responsibilities and time frame, in conjunction with UNHCR and UNICEF.

2. P.D.H. to assign to the Deputy Director for Sanitation responsibility for CDD. The Deputy Director would be responsible for; planning, coordination, surveillance including outbreak investigation, overall training, and liaison with the Provincial CDD programme staff.

3. The Field Supervising Medical Officer (FSMO) will be responsible for ensuring adequate coordination, organisation, and management of the activities related to CDD within his district.

4. At the BHU the medical officer will be responsible for ensuring coordination of the activities related to CDD.

REPORT ON THE

REVIEW OF CONTROL OF DIARRHOEAL DISEASE ACTIVITIES,

AFGHAN REFUGEE HEALTH PROGRAMME, NWFP, 1990